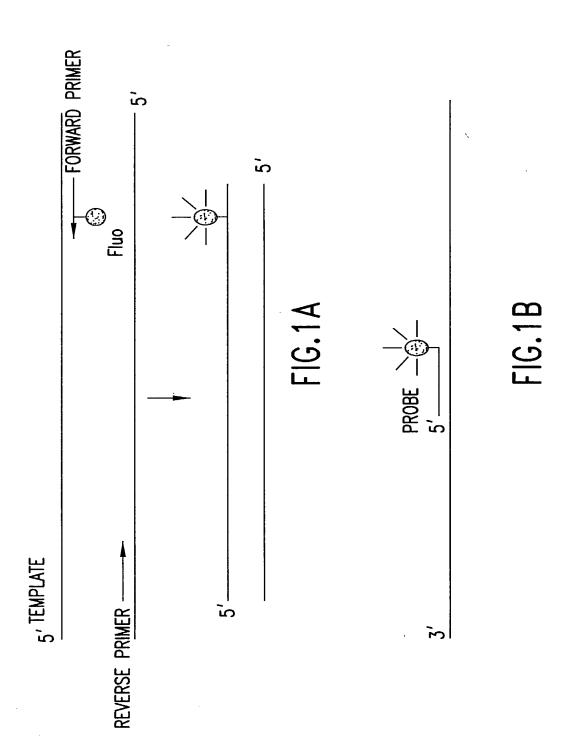
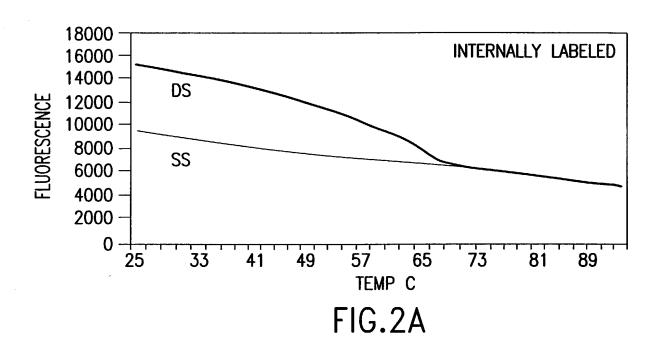
Appl No 10/026,952; Filed December 27, 2001
Dkt. No 0942 4980006/RWE/AGU; Group Art Unit: 1623
Inventor(s): NAZARENKO et al., Tel. 202/371-2600
[Title Primers and Methods for the Detection and Discrimination of Nucleic Acids



- Appl No 10/026,952, Filed December 27, 2001 Dkt. No. 0942.4980006/RWE/AGU; Group Art Unit 1623 Inventor(s). NAZARENKO et al., Tel. 202/371-2600 Title: Primers and Methods for the Detection and Discrimination
- of Nucleic Acids



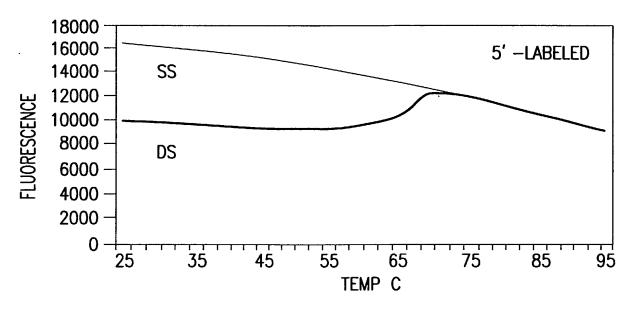


FIG.2B

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Dkt No 0942 4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s). NAZARENKO et al., Tel. 202/371-2600
Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

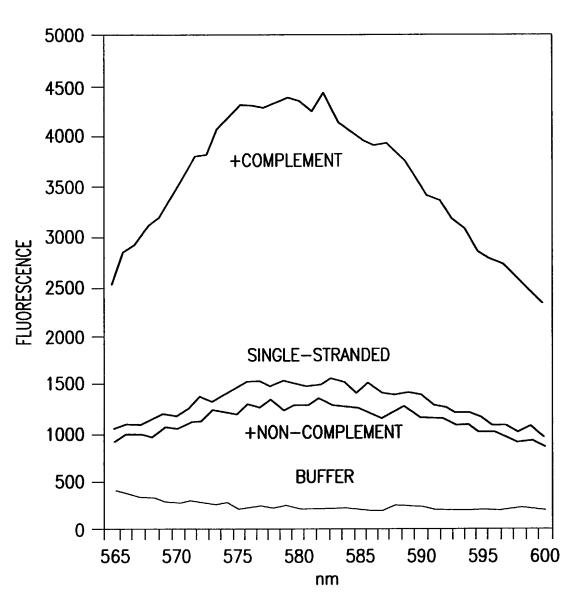


FIG.3

Appl No 10/026,952; Filed December 27, 2001
|Dkt No 0942 4980006/RWE/AGU, Group Art Unit: 1623
Inventor(s) NAZARENKO et al; Tel 202/371-2600
|Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

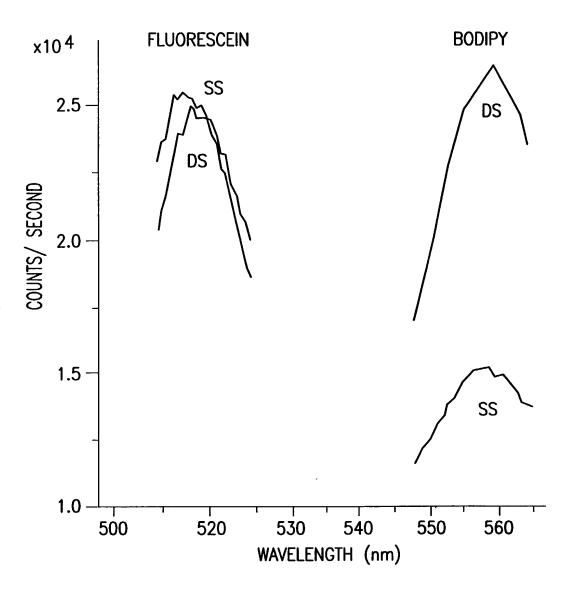


FIG.4

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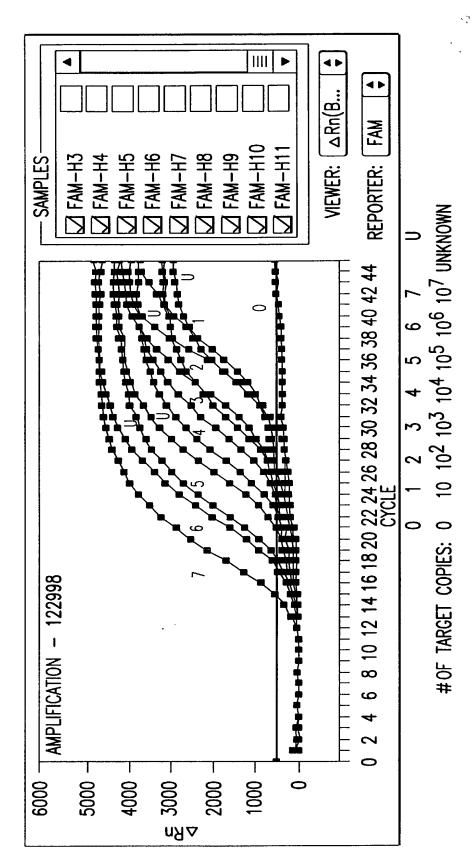


FIG.5A

Appl. No. 10/026,952, Filed. December 27, 2001
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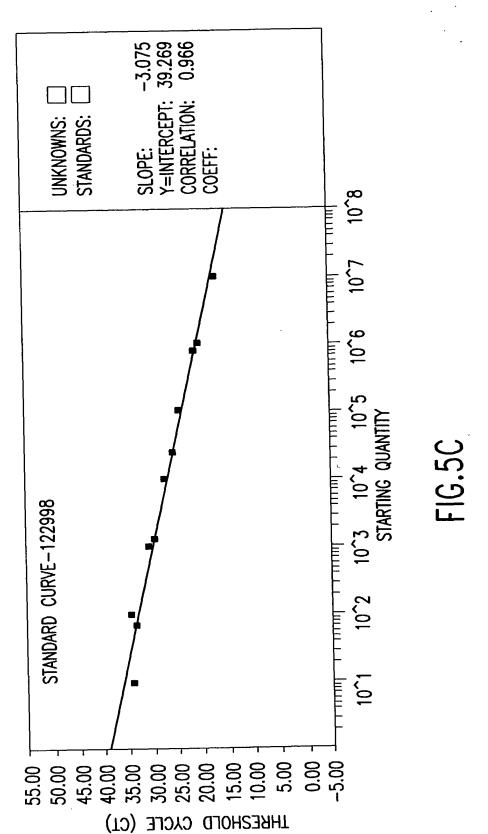
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THRESHOLD CYCLE CALCULATION THRESHOLD USE THRESHOLD: 505.0 SUGGEST MULT. * STDDEY: 10.0 * 14.012 MULT. * STDDEY: 10.0 * 14.012 FAM—H1 30.459 23.908 ≡ FAM—H2 26.266 18.654 FAM—H2 26.266 18.654 FAM—H4 18.267 18.699 ▼ UPDATE CALCULATIONS
RESHOLD CYCLE CALCULATION ARESHOLD CT RESHOLD: 505.0 SUGGEST RESHOLD: 10.0 * 14.012 RESHOLD: 2.0 FAM-H2 26.266 FAM-H2 22.661 FAM-H3 22.661 FAM-H4 18.267 4 STOP: 12
RESHOLD CYCLE CALCULATION ARESHOLD SESHOLD: 505.0 SUGGEST STDDEY: 10.0 * 14.012 RESHOLD: 2.0 ASELINE ASELINE ASELINE ASELINE UPDATE CALCULATIONS FAM—H4 FAM—H4
RESHOLD CYCLE CALCULATION ARESHOLD STDDEY: 10.0 * 14.012 RESHOLD: 2.0 ASELINE ASELINE ASELINE UPDATE CALCULATIONS
THRESHOLD CYCLE CALCULATION THRESHOLD USE THRESHOLD: 505.0 SUGGEST MULT. * STDDEY: 10.0 * 14.012 OMIT THRESHOLD: 2.0 BASELINE START: 4 STOP: 12 UPDATE CALCULATIONS

FIG.5B

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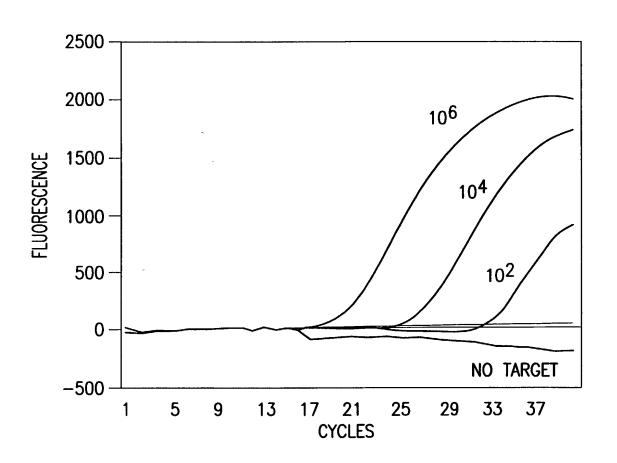


FIG.6

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Dkt No 0942 4980006/RWE/AGU, Group Art Unit. 1623
Inventor(s). NAZARENKO et al., Tel·202/371-2600
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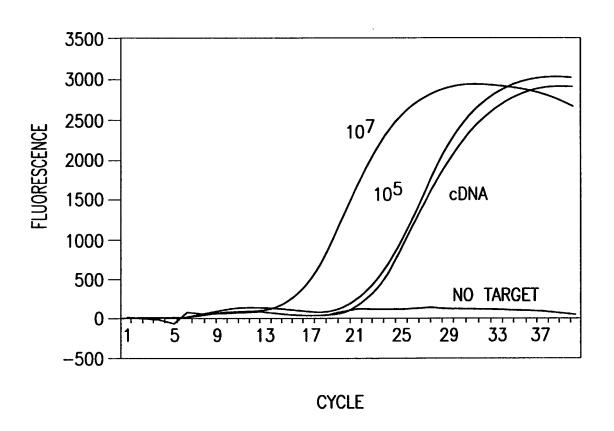


FIG.7

Appl. No 10/026,952, Filed. December 27, 2001 Dkt No 0942 4980006/RWE/AGU, Group Art Unit 1623 Inventor(s). NAZARENKO et al., Tel 202/371-2600 Title. Primers and Methods for the Detection and Discrimination of Nucleic Acids

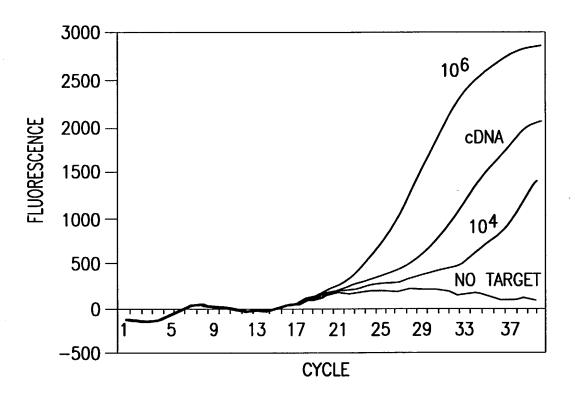
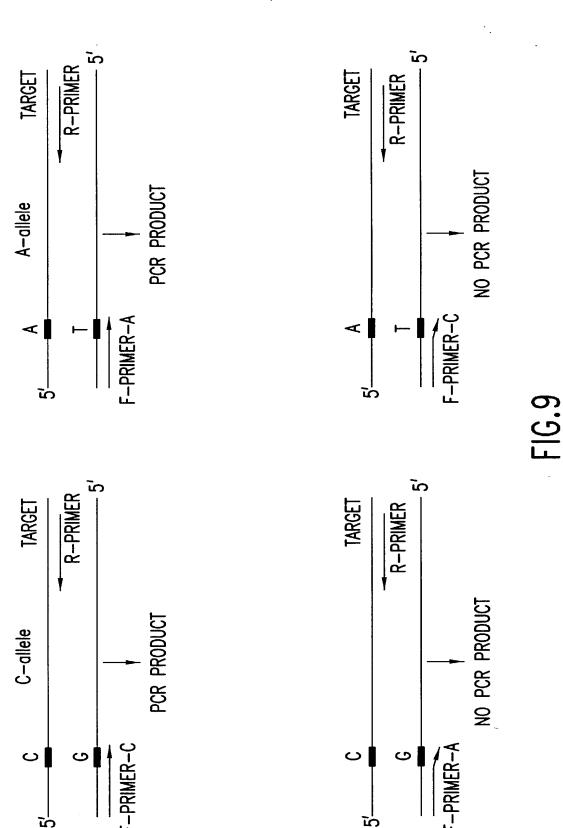


FIG.8

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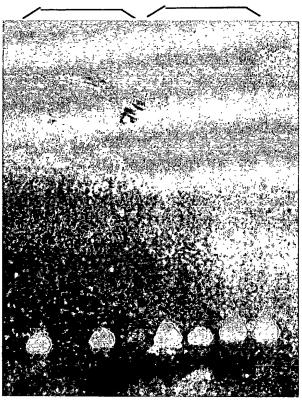


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Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

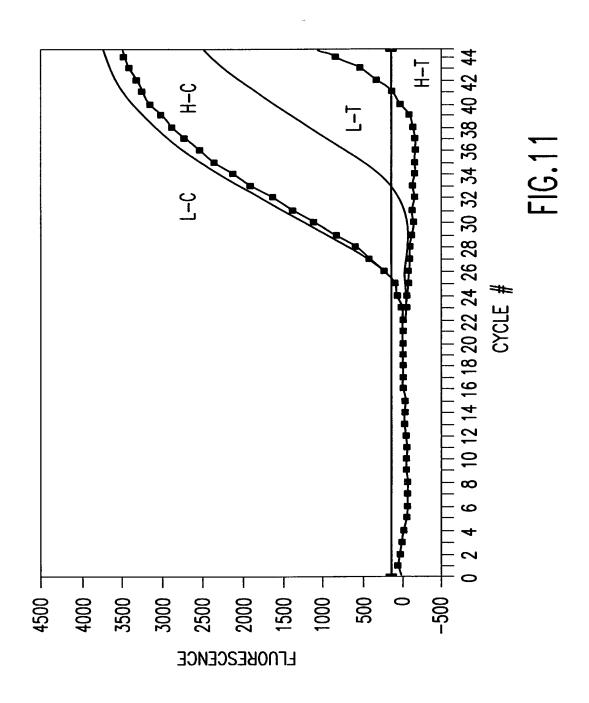
12/60

modified unmodified

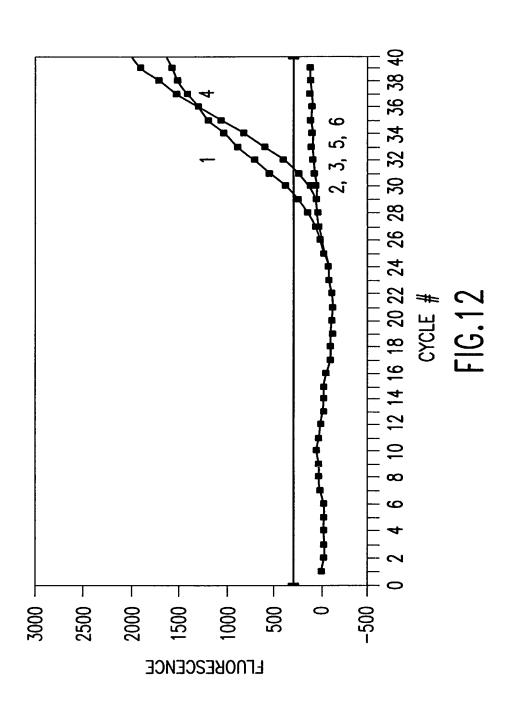


1 2 3 4 5 6 7 8 FIG.10

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Dkt No 0942.4980006/RWE/AGU; Group Art Unit. 1623
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Inventor(s) NAZARENKO et al.; Tel 202/371-2600
Title Primers and Methods for the Detection and Discrimination of Nucleic Acids

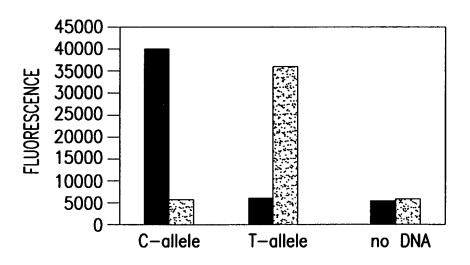
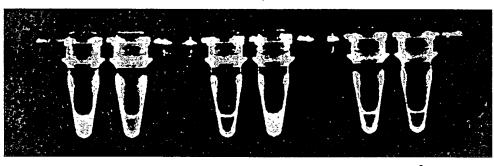


FIG.13A

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1 2 3 4 5 6

C-primer

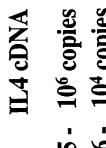
T-primer

FIG.13B

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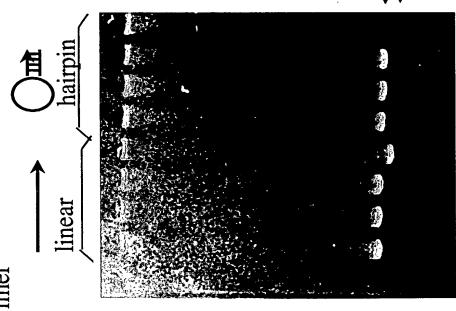
Appl No. 10/026,952, Filed December 27, 2001 Dkt. No 0942 4980006/RWE/AGU, Group Art Unit 1623 Inventor(s). NAZARENKO et al.; Tel 202/371-2600
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10⁶ copies10⁴ copies0 copies

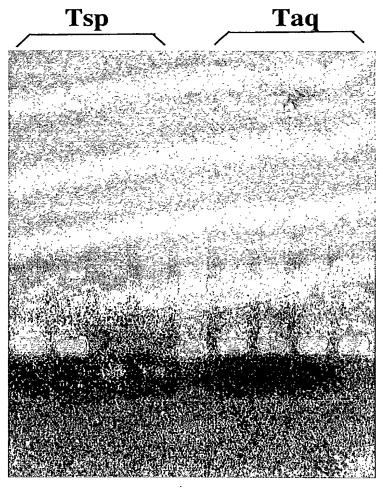
PCR productPrimer-dimer



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1 2 3 4 M 4 3 2 1 FIG.15

1 - 297 WT

2 - 300 WT

3 - 297 C→T Mut

4 - 300 G→T Mut

M - 100 bp marker

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1, 2 - 50 ng DNA 3, 4 - 20 ng DNA 5, 6 - no DNA

M-1 kb marker

MM12345

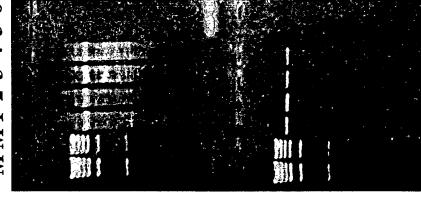


FIG. 16B



Primers Linear

Primers Hairpin

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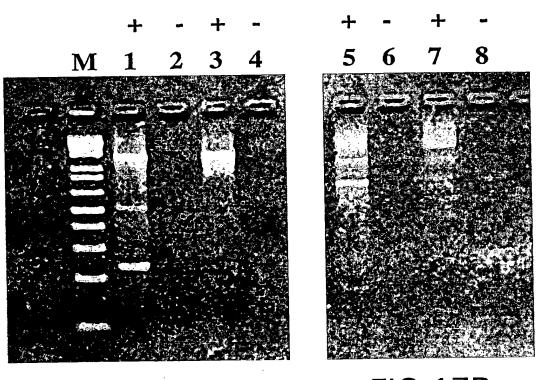


FIG.17A FIG.17B

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Dkt No. 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al., Tel 202/371-2600
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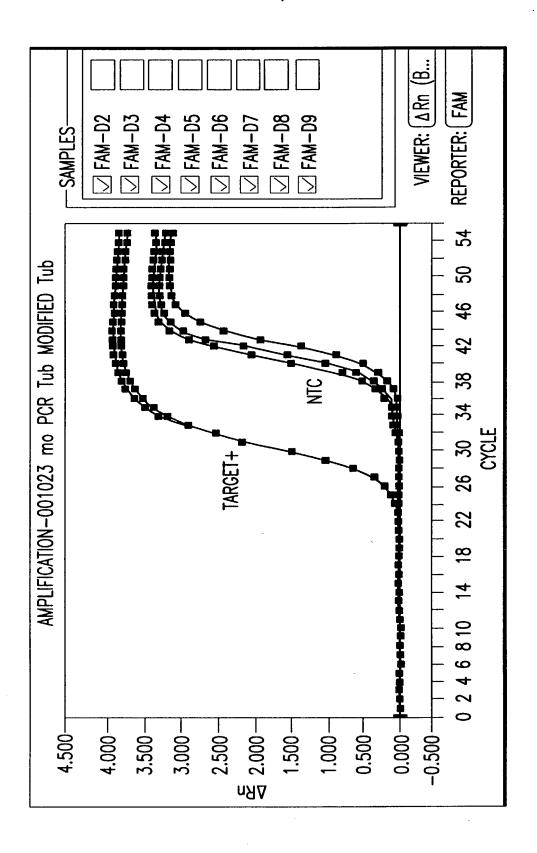


FIG.18A

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Inventor(s) NAZARENKO et al., Tel. 202/371-2600
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of Nucleic Acids

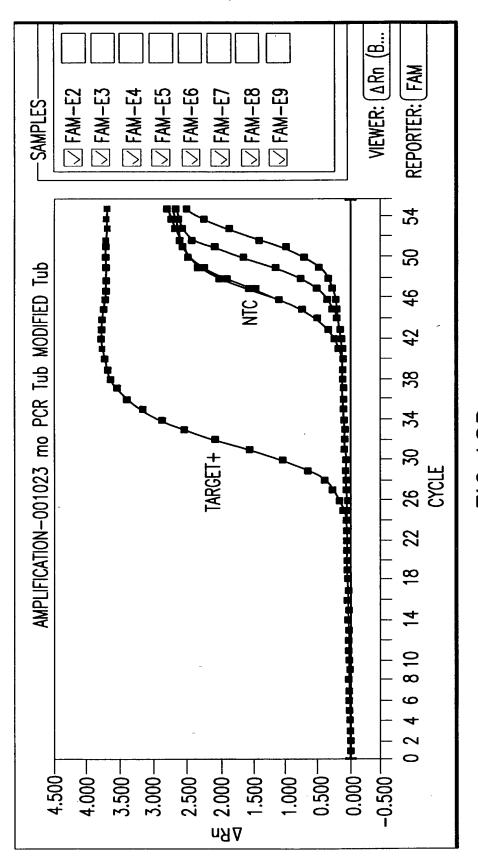


FIG. 18B

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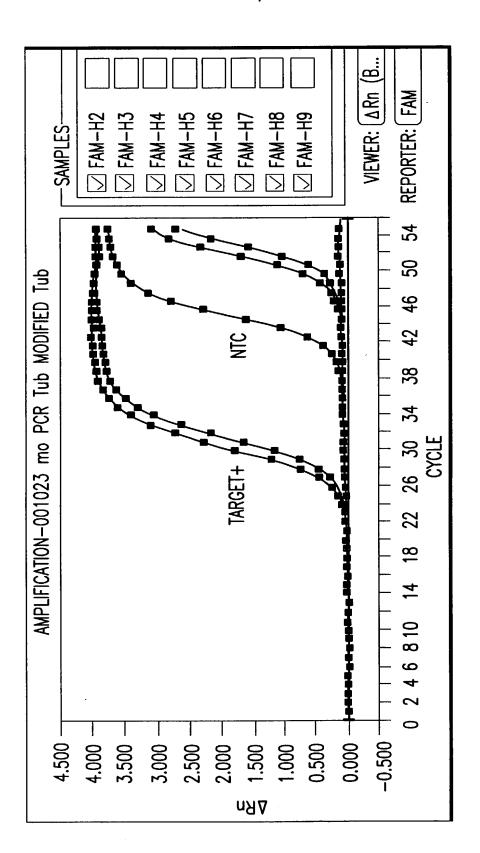


FIG.18C

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Inventor(s) NAZARENKO et al., Tel·202/371-2600
Title: Primers and Methods for the Detection and Discrimination of Nucleic Acids

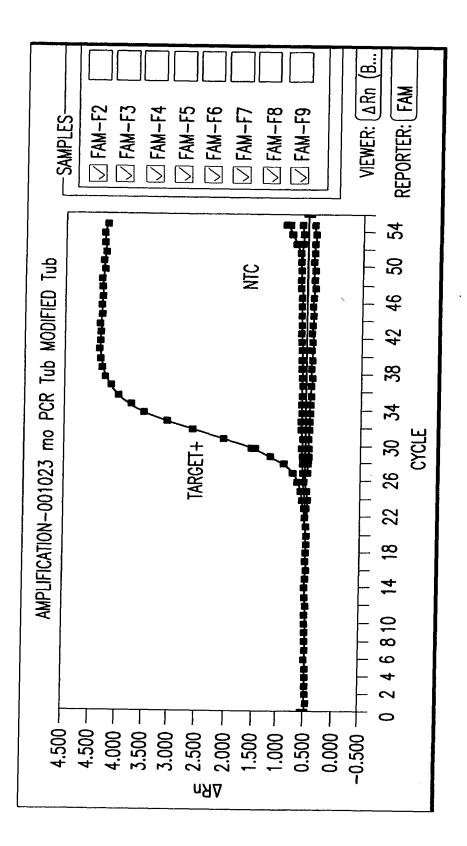


FIG. 18D

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Inventor(s) NAZARENKO et al., Tel: 202/371-2600
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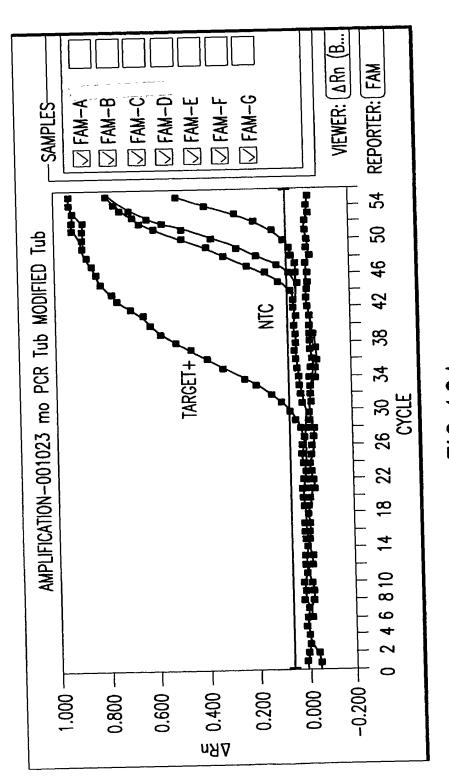


FIG.19A

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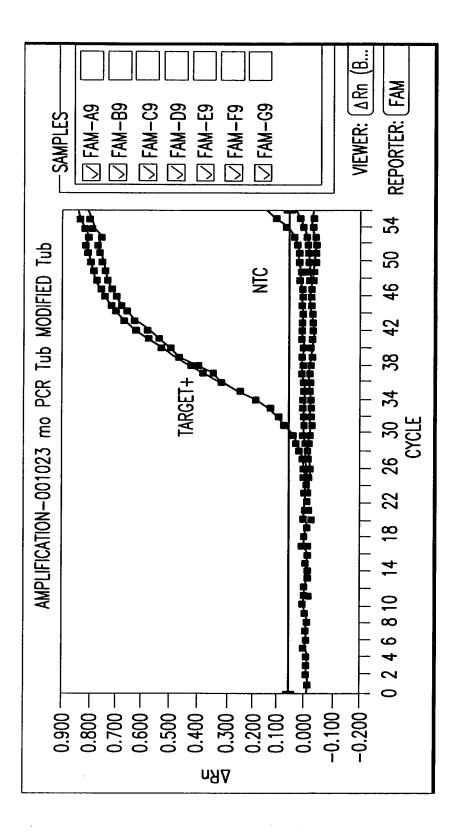


FIG. 19B

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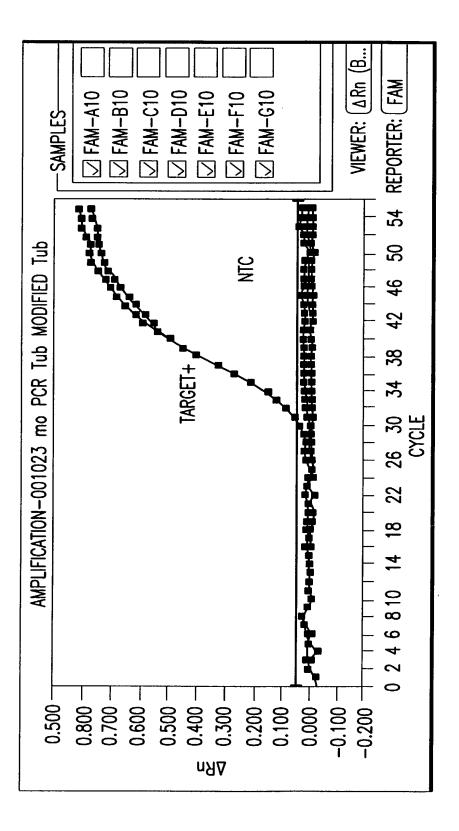


FIG. 19C

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Inventor(s) NAZARENKO et al., Tel. 202/371-2600
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of Nucleic Acids

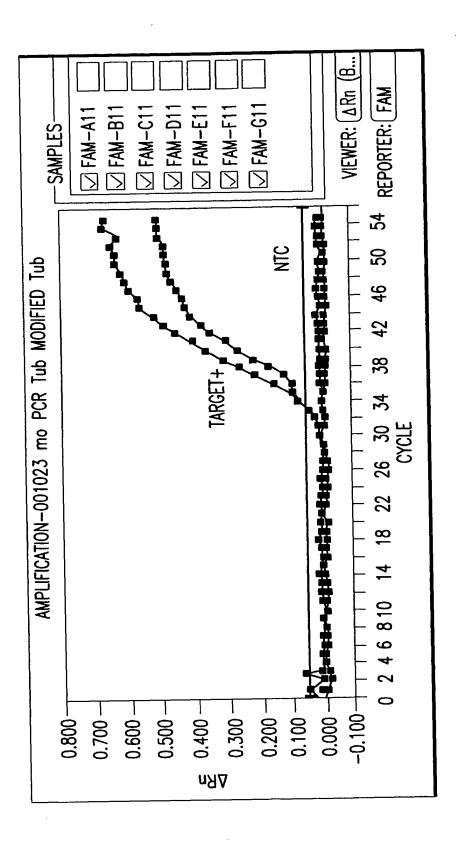


FIG.19D

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Dkt No 0942 4980006/RWE/AGU, Group Art Unit: 1623
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of Nucleic Acids

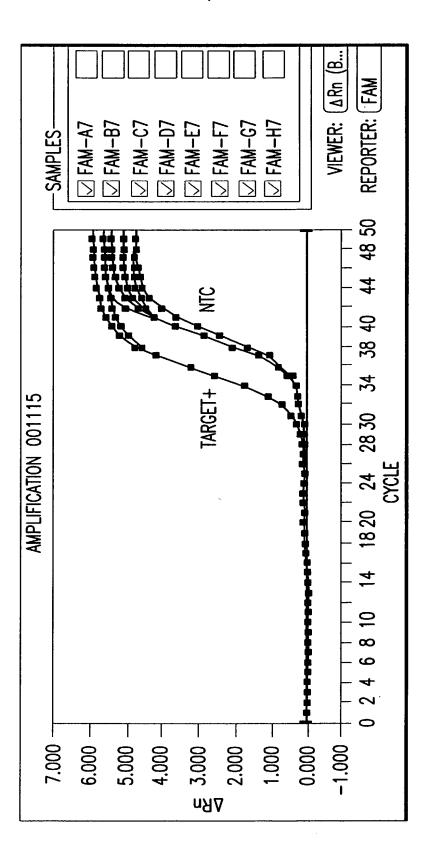


FIG.20A

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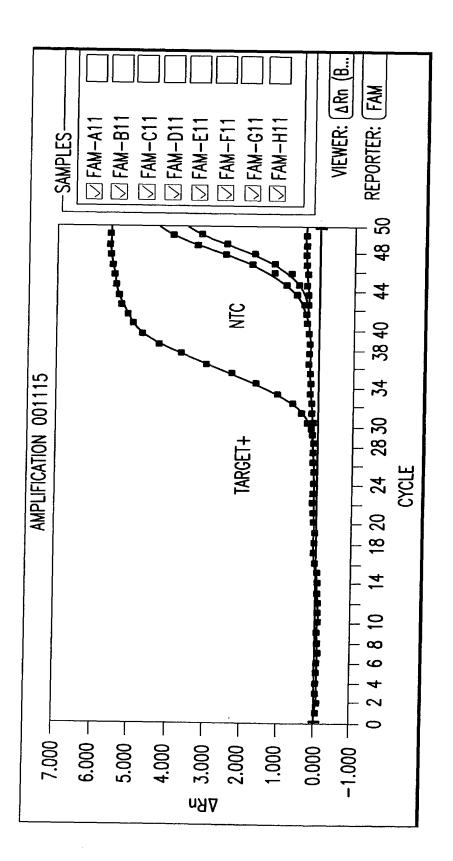


FIG.20B

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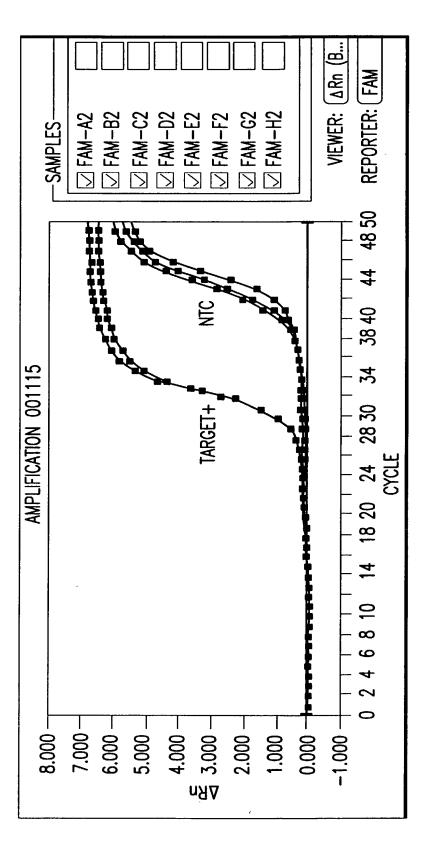


FIG.20C

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Dkt No. 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s) NAZARENKO et al., Tel. 202/371-2600
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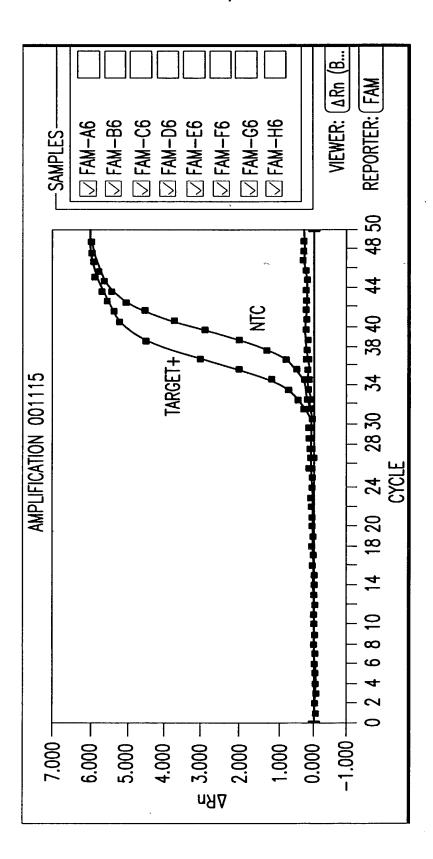


FIG.20D

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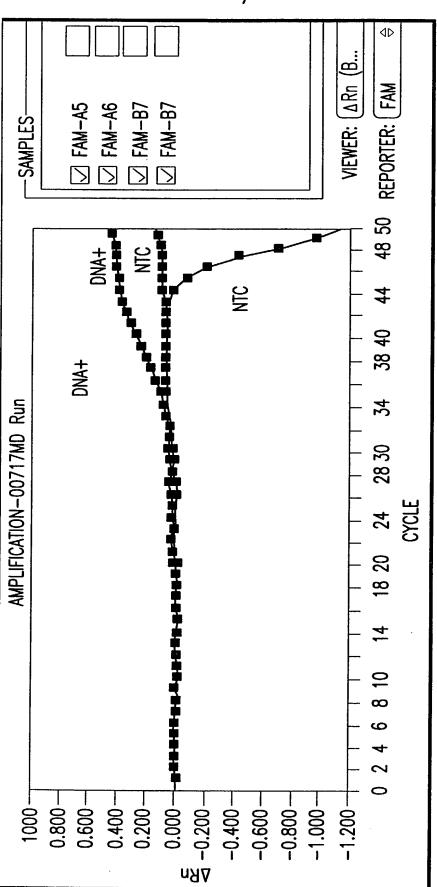
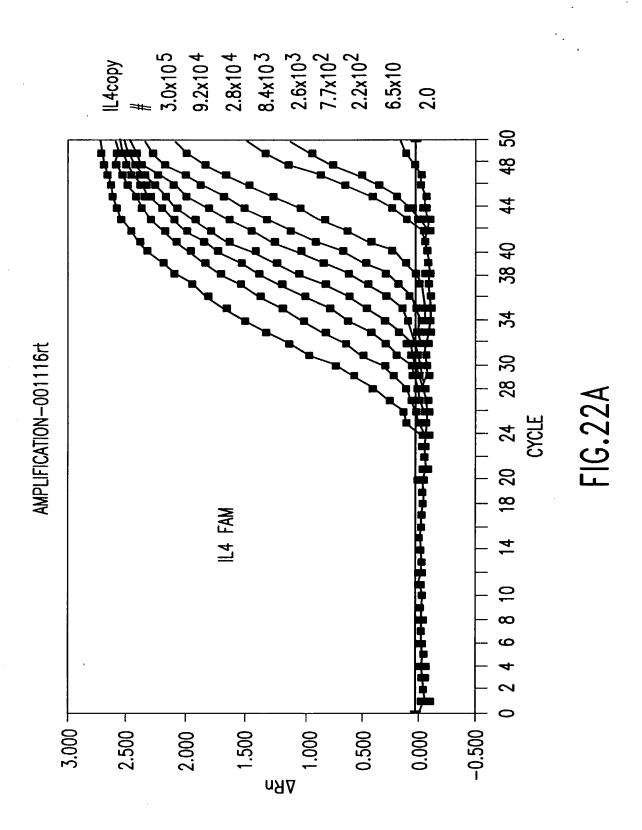
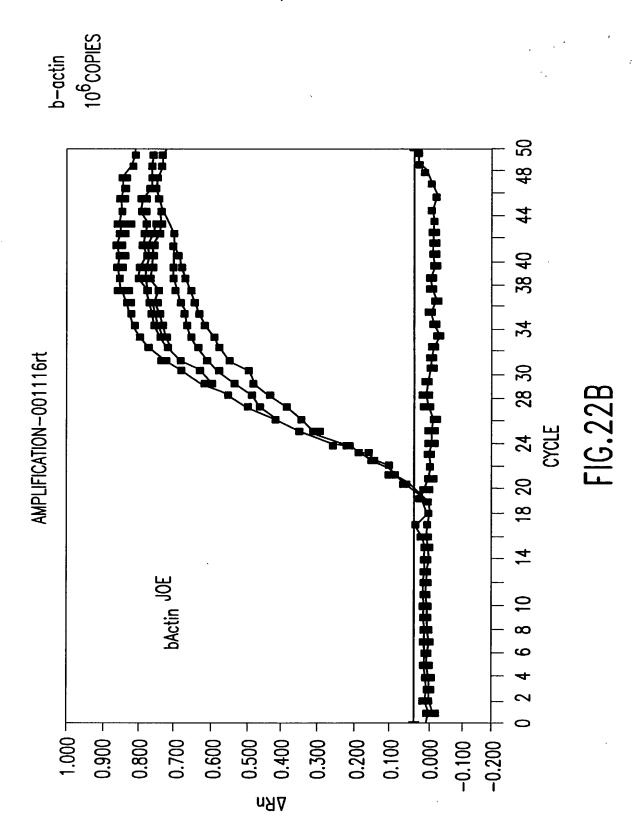


FIG.21

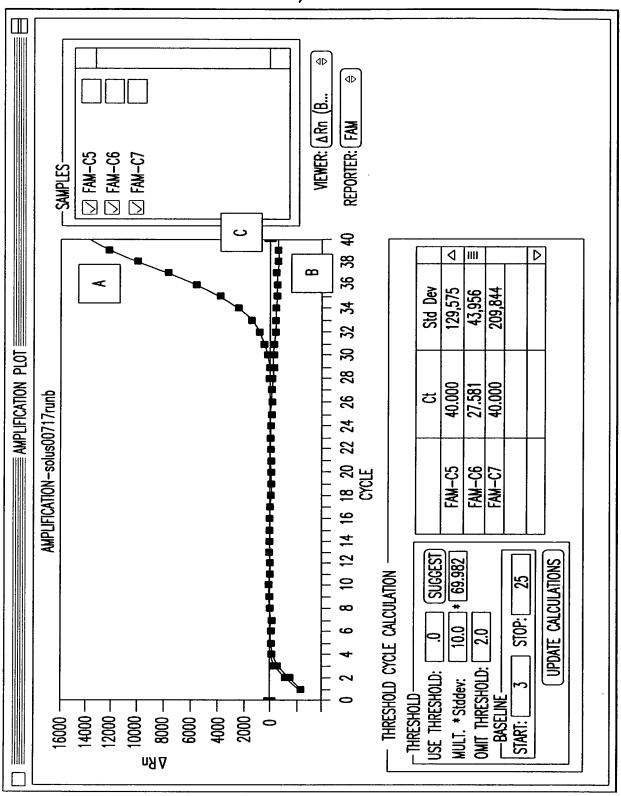
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Dkt. No. 0942 4980006/RWE/AGU, Group Art Unit 1623
Inventor(s). NAZARENKO et al; Tel 202/371-2600
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Inventor(s). NAZARENKO et al., Tel· 202/371-2600
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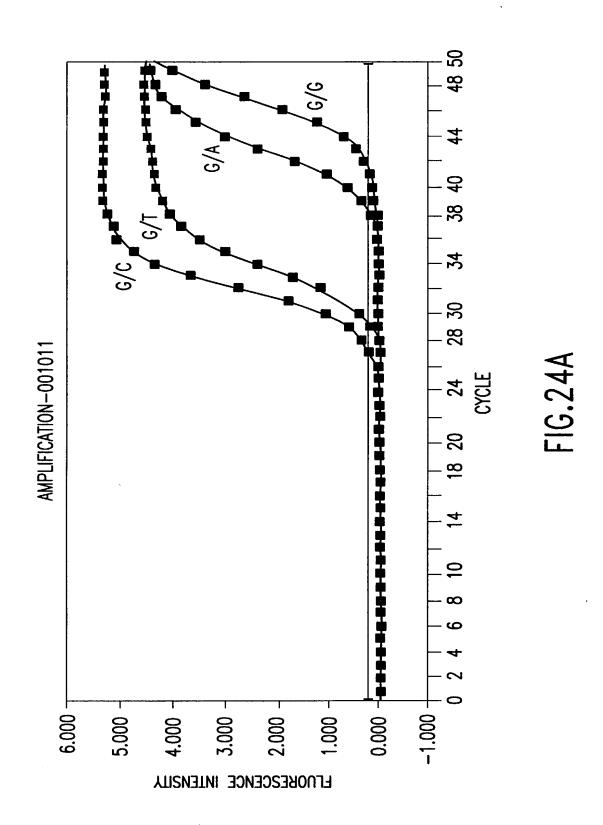
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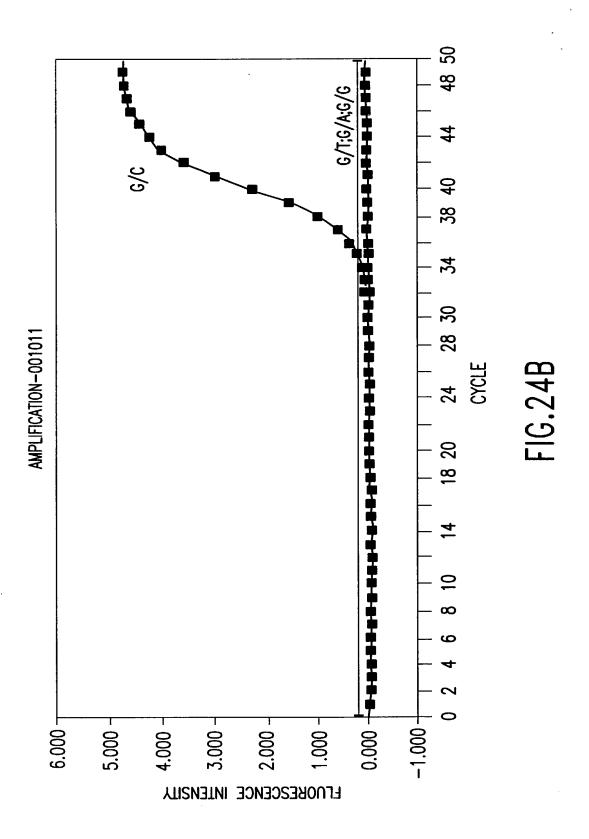
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Inventor(s)· NAZARENKO et al.; Tel· 202/371-2600

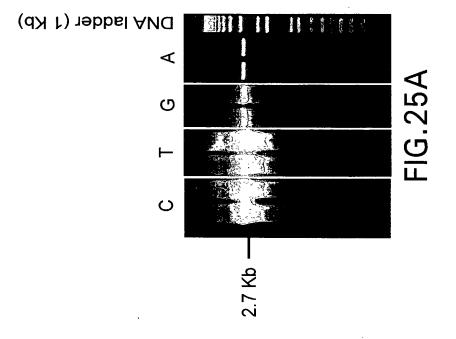
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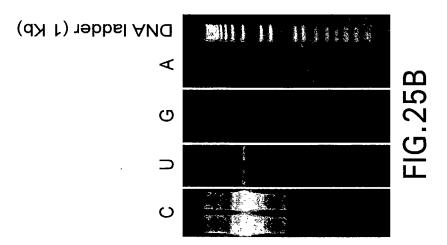
of Nucleic Acids



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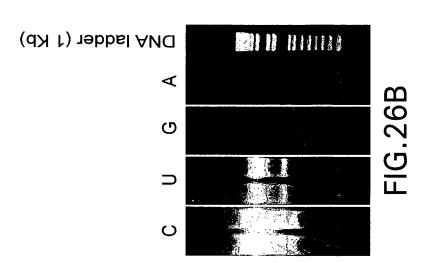
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FIG.26A

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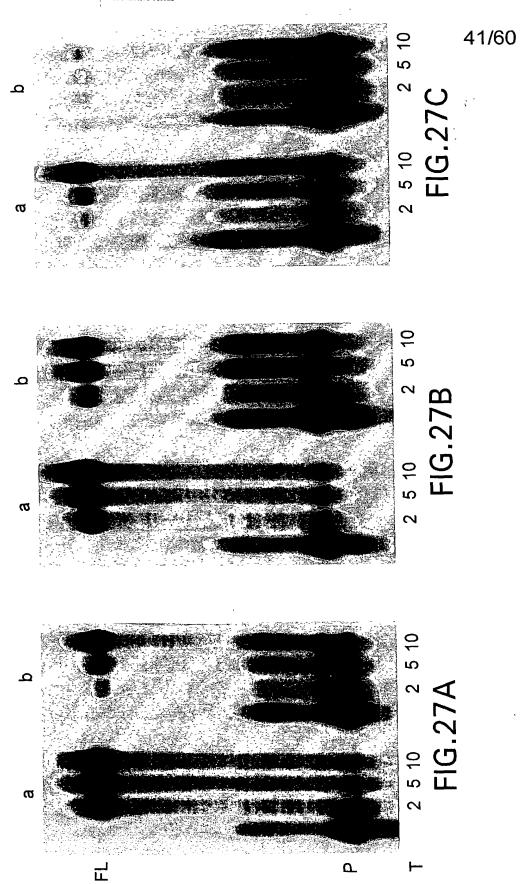
DNA ladder (1 Kb)

⋖

G

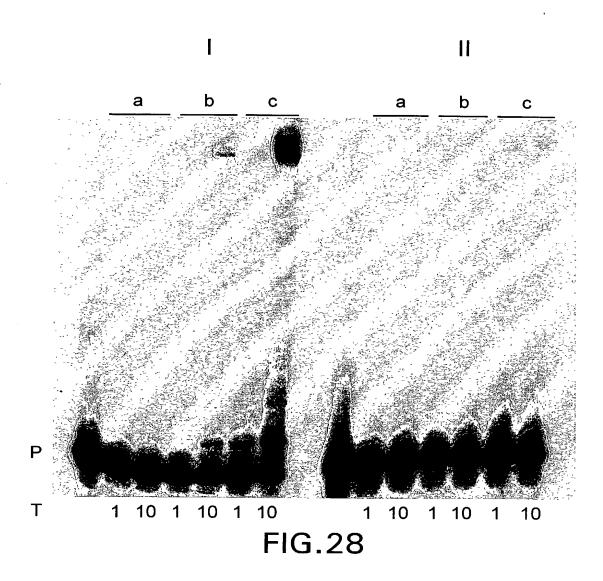
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Dkt No. 0942.4980006/RWE/AGU, Group Art Unit 1623
Inventor(s): NAZARENKO et al., Tel. 202/371-2600
Title: Primers and Methods for the Detection and Discrimination of Nucleic Acids



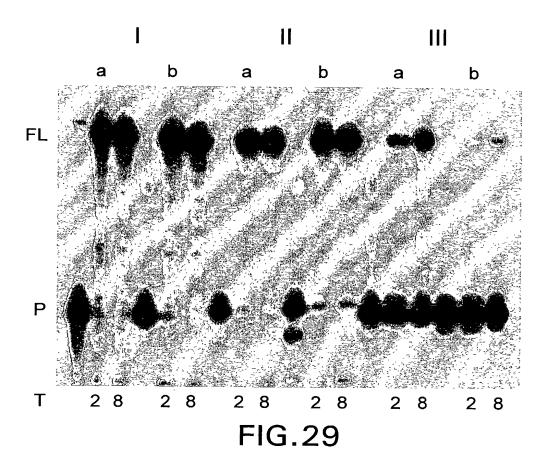
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Inventor(s)· NAZARENKO et al., Tel. 202/371-2600
Title Primers and Methods for the Detection and Discriminatio of Nucleic Acids

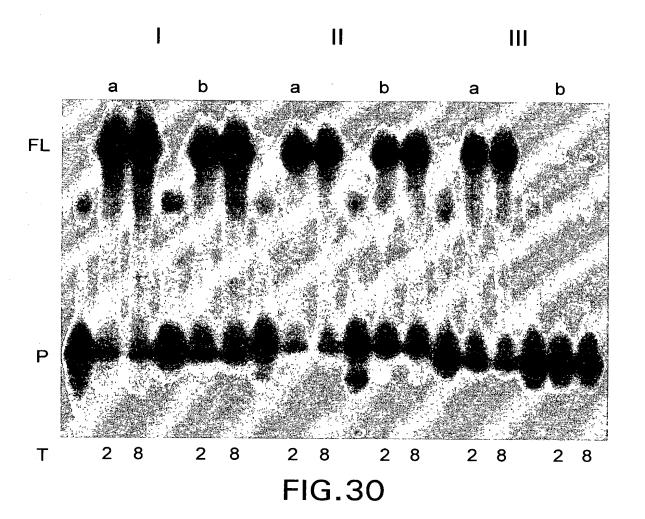


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Inventor(s) NAZARENKO et al; Tel 202/371-2600
Title. Primers and Methods for the Detection and Discrimination
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of Nucleic Acids

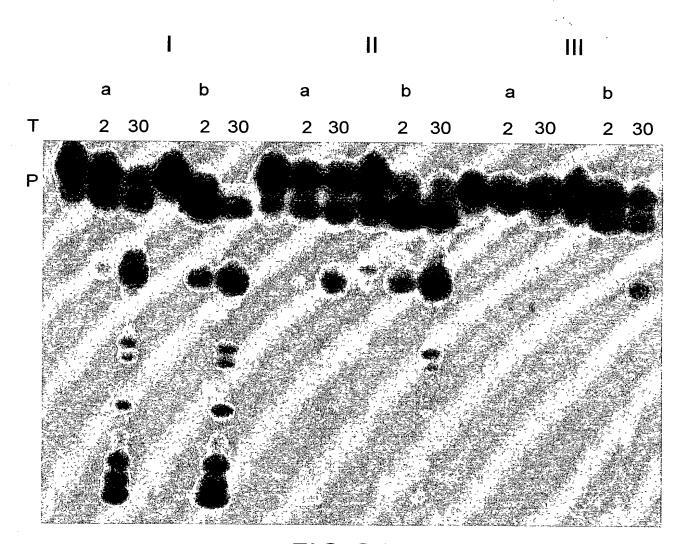


FIG.31

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of Nucleic Acids

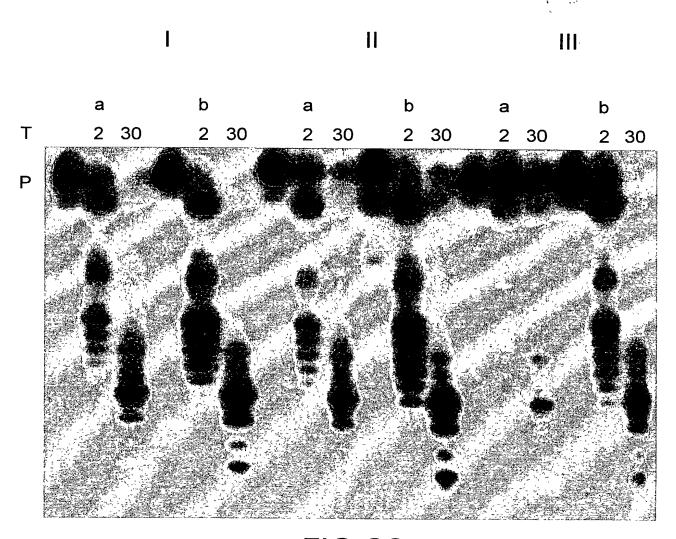


FIG.32

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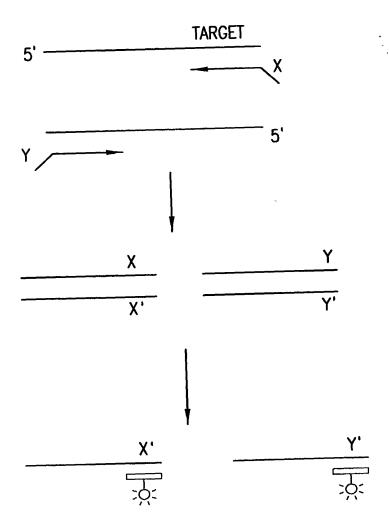
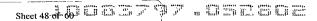
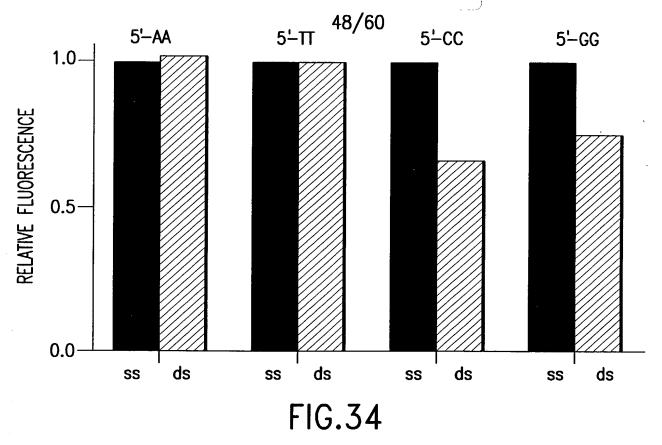


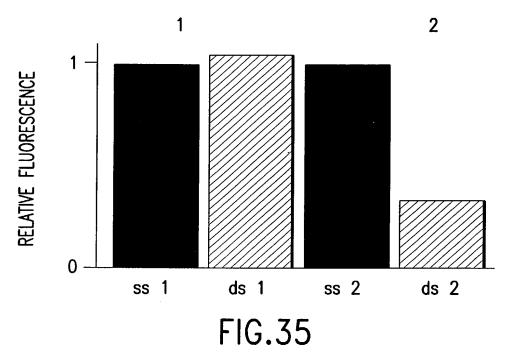
FIG.33

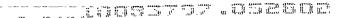


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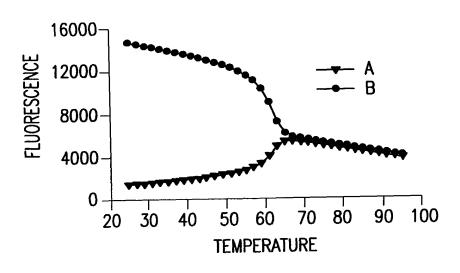


FIG.36

ggaagagtaccaccgacatcttg 5' CCTTCTCATGGTGGCTGTAGAAC 3'

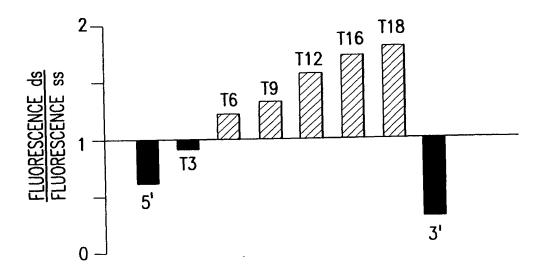


FIG.37

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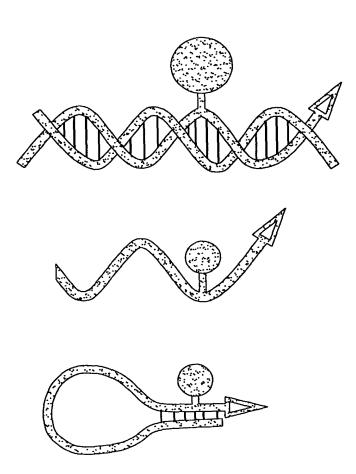


FIG.38

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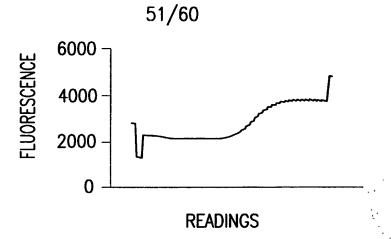


FIG.39A

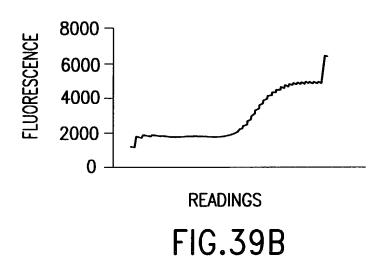
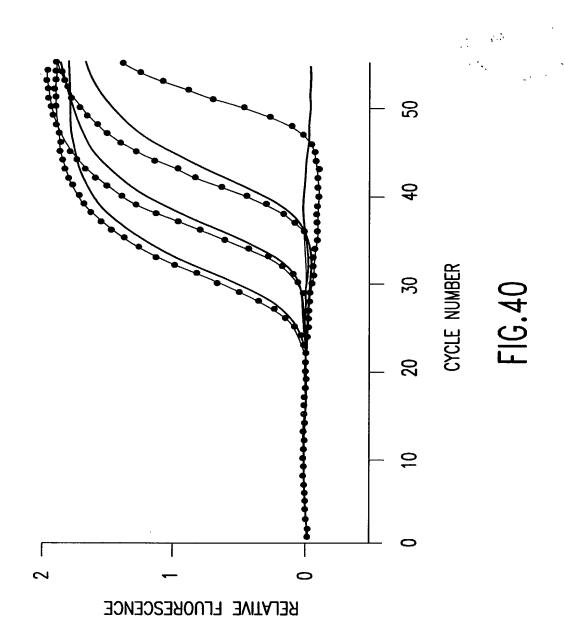


FIG.39C

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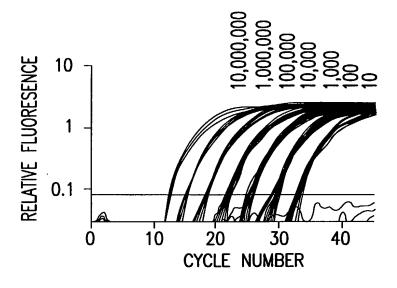


FIG.41A

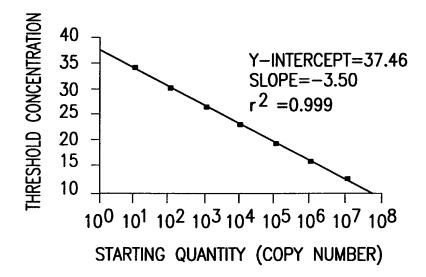
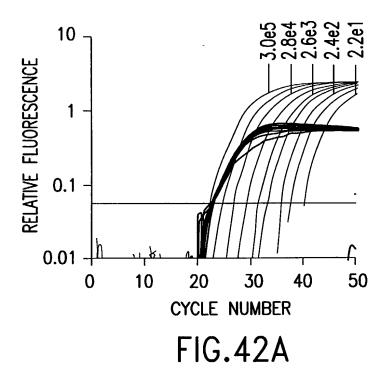
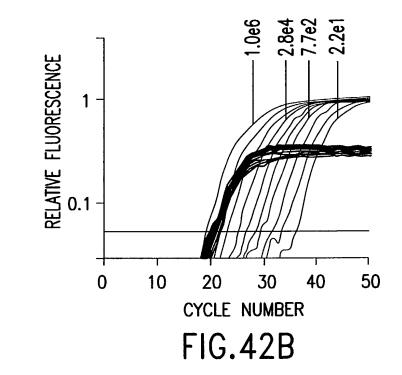


FIG.41B

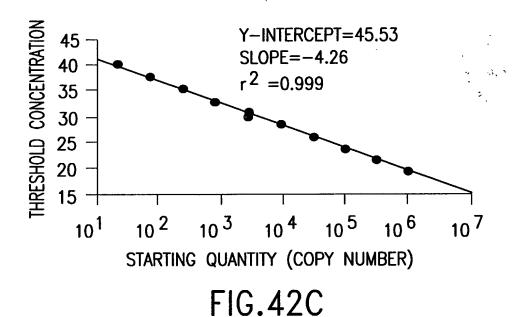
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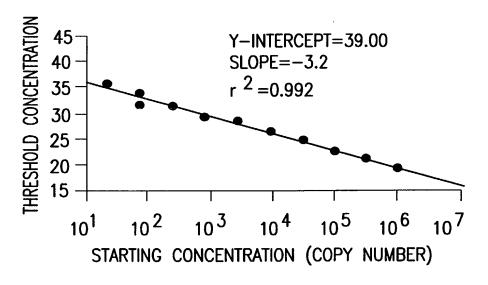
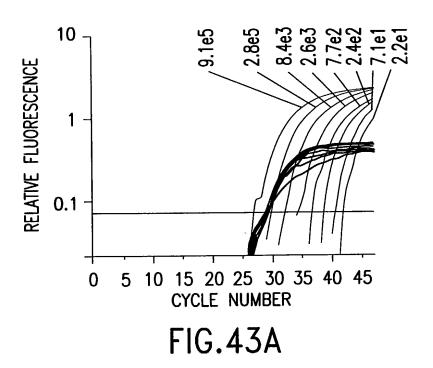
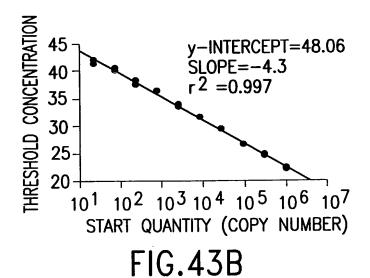


FIG.42D

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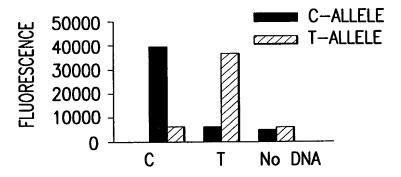
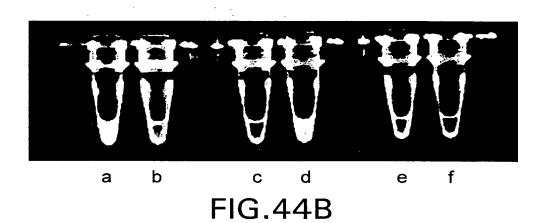


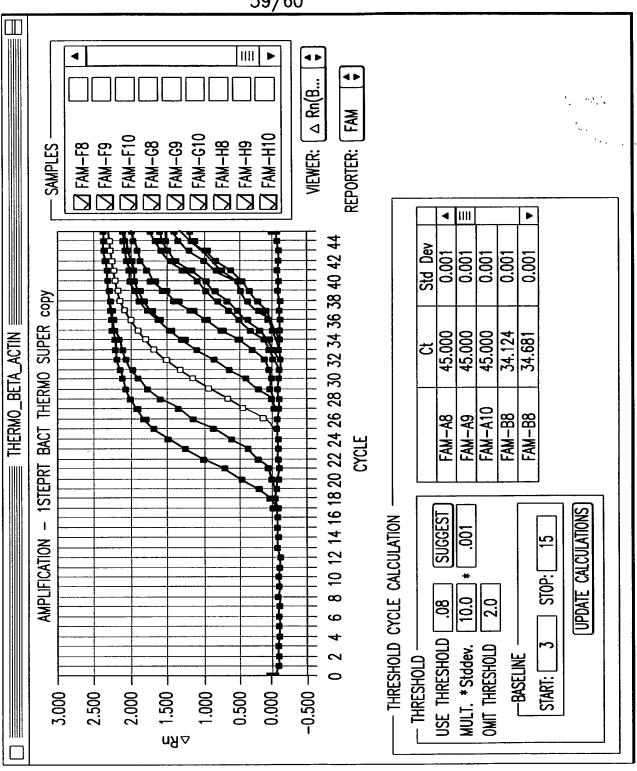
FIG.44A

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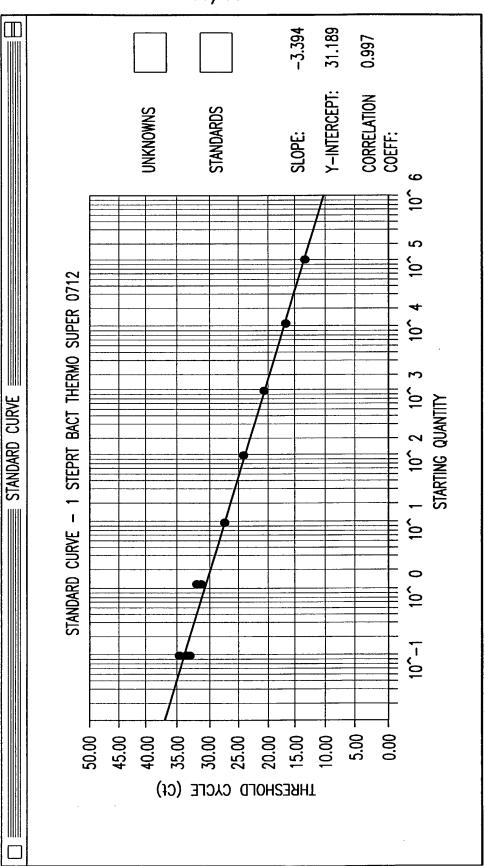


FIG.46